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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/331,189 11/29/99 ULRICH

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EXAMINER

MM91/0823

FOLEY & LARDNER
3000 K STREET NW
SUITE 500
WASHINGTON DC 20007-5109

WINSTEDT, J

ART UNIT

PAPER NUMBER

2872

DATE MAILED:

08/23/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/331,189

Applicant(s)

ULRICH ET AL.

Examiner

Jennifer E Winstedt

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 June 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-22, 25-35, 39 and 40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-22, 25-35, 39 and 40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

The applicant's have amended claim 16 so it recites a confocal microscope in the body of the claim and 29 so it recites that the objective is a microscope objective.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 29, 30, and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Yano (U.S. Patent 5,701,197).

Regarding claim 29, Yano discloses a confocal microscope defining a path of rays and comprising a microscope objective (15, Figure 1); an ocular (35, Figure 1); a tube lens (32, Figure 1); and an optical system for image rotation disposed in the path of rays of the microscope (12, Figure 1), wherein the optical system is disposed between

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the tube lens and microscope objective in the path of rays of the confocal microscope (see Figure 1).

Regarding claim 30, Yano discloses that the optical system for image rotation is a prism (12, Figure 1).

Regarding claim 39, Yano discloses that the objective comprises an axially moveable objective (15b, Figure 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16-18, 20-22, 25, 26, 29-31, and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horikawa (U.S. Patent 4,734,578) in view of Dewald et al. (U.S. Patent 5,365,288).

Regarding claims 16-18, 20-22, and 25, Horikawa discloses a confocal microscope defining a path of rays and comprising an ocular (82, Figure 8), a tube lens (61, Figure 8), a scanning lens (60, Figure 8), and a scanning mirror (59, Figure 8). Horikawa does not disclose an optical system for image rotation disposed between the scanning lens and the scanning mirror in the path of the rays of the microscope; wherein the optical system for image rotation is a dove prism or a mirror system with an odd number of mirrors, such as a K mirror, and serves to rotate all scanning and video

images fed through the scanner into the microscope. Dewald et al. discloses an optical system for image rotation that is disposed in path of rays (20, Figure 2), wherein the optical system for image rotation is disposed between a scanning lens (22, Figure 2) a scanning mirror (16, Figure 2), is a dove prism (column 3, lines 13-15) or a mirror system with an odd number of mirrors, such as a K mirror (20, Figure 2), and serves to rotate all scanning and video images fed into the device (see Figure 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to include in the microscope of Horikawa an optical system for images rotation as Dewald et al. suggests in order to compensate for the horizontal movement of the image by the scanning mirror and keep the image right side up (column 1, lines 42-46; Dewald et al.) so a sample is more easily viewed by a viewing looking through the ocular.

Regarding claims 29-31 and 33-35, Horikawa in view of Dewald et al. discloses the claimed invention as described above except for the optical system for image rotation being disposed between the tube lens and the objective. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the optical system for image rotation be disposed between the tube lens and the objective, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Regarding claim 26, Horikawa in view of Dewald et al. discloses that the laser scanner further comprises a fixed thick beam splitter to avoid interferences (55, Figure 8; Horikawa).

Claims 19 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horikawa in view of Dewald et al. as applied to claims 16-18, 20-22, 25, 29-31, and 33-35 above, and further in view of Wasmund et al. (U.S. Patent 4,181,436).

Regarding claims 19 and 32, Horikawa in view of Dewald et al. discloses the claimed invention as described above except for the optical system for rotation being an Abbe prism. Wasmund et al. discloses an optical system for image rotation that is an Abbe prism (column 4, lines 3-4). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have the optical system for image rotation be an Abbe prism as Wasmund et al. suggests in order to be able to control the beam (column 3, line 66 – column 4, line 2; Wasmund et al.).

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horikawa in view of Dewald et al. as applied to claims 16-18, 20-22, 25, 29-31, and 33-35 above, and further in view of Yano.

Regarding claim 27, Horikawa in view of Dewald et al. discloses the claimed invention as described above except for an axially movable objective being provided. Yano discloses an axially movable objective that is provided (15b, Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an axially movable objective in the microscope of Horikawa in view Dewald et al. as Yano suggests in order to achieve fine focus adjustment (column 3, lines 49-50; Yano).

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Claims 28 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horikawa in view of Dewald et al. as applied to claims 16-18, 20-22, 25, 29-31, and 33-35 above, and further in view of Kapitza (U.S. Patent 5,896,224).

Regarding claims 28 and 40, Horikawa in view of Dewald et al. discloses the claimed invention as described above except for an axially movable objective turret being provided. Kapitza discloses an axially movable turret (3, Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide an axially movable objective turret in the microscope of Horikawa in view of Dewald et al. as Kapitza suggests in order to be able to have more than one view of the object.

Response to Arguments

Applicant's arguments filed 6/21/01 regarding claims 29, 30, and 39 and the Yano reference have been fully considered but they are not persuasive.

In response to applicant's argument that objective lens 30 is the objective lens of the microscope 1 and that there is no optical system for image rotation arranged between microscope objective 30 and ocular 35, the examiner points out that the microscope of Yano includes both the slit lamp microscope body 1 and confocal scanning microscope unit 2 (column 2, lines 58-62) and not just the slit lamp microscope body 1. Therefore, since objective 15 is an objective of unit 2 and unit 2 is part of the confocal microscope, objective 15 must be an objective of the microscope.

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As can be seen from Figure 1, an optical system for image rotation is indeed arranged between the microscope objective 15 and the ocular 35.

Applicant's arguments with respect to the combination of the Lanni and Dewald references as they pertain to claims 16-22, 25-35, and 40 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer E Winstedt whose telephone number is (703) 305-0577. The examiner can normally be reached on 7:30 - 17:00 Mon. - Fri..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Casandra Spyrou can be reached on (703) 308-1687. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JW
August 15, 2001

A handwritten signature in black ink, appearing to read 'C. Spyrou', with a stylized, flowing script.

**Cassandra Spyrou
Supervisory Patent Examiner
Technology Center 2800**